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Environmental Externalities: What the World Bank Can Learn From CPG Companies About the Environment

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Abstract

Academics and non-governmental organization (NGOs) increasingly highlight how foreign development assistance and foreign direct investment may result in environmental harm. Despite being an international development organization with a clear and important altruistic agenda, The World Bank's aid efforts, at times, seem to have perverse effects. In this thesis, I explore the adverse effects of the World Bank's commitment to poverty alleviation on the environment. In contrast, big consumer packaged goods (CPG) companies like Unilever and PepsiCo often follow corporate social responsibility (CSR) initiatives that insure the environment in ways that some international development organizations do not. The purpose of this paper is to analyze various case studies of the environmental interactions of the World Bank and these CPG companies. Through these case studies, this paper will outline the organizational incentives and stakeholders that make the organizations interact with the environment the way they do. Furthermore, this paper will analyze the alignment of environmental protection goals of the private sector with those of the World Bank.

Keywords

NGO, World Bank, environment

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Environmental Externalities

What the World Bank Can Learn from CPG Companies About the Environment

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Abstract

Academics and non-governmental organization (NGOs) increasingly highlight how foreign development assistance and foreign direct investment may result in environmental harm. Despite being an international development organization with a clear and important altruistic agenda, The World Bank's aid efforts, at times, seem to have perverse effects. In this thesis, I explore the adverse effects of the World Bank's commitment to poverty alleviation on the environment. In contrast, big consumer packaged goods (CPG) companies like Unilever and PepsiCo often follow corporate social responsibility (CSR) initiatives that insure the environment in ways that some international development organizations do not. The purpose of this paper is to analyze various case studies of the environmental interactions of the World Bank and these CPG companies. Through these case studies, this paper will outline the organizational incentives and stakeholders that make the organizations interact with the environment the way they do. Furthermore, this paper will analyze the alignment of environmental protection goals of the private sector with those of the World Bank.

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I) Motivation

The area of this research project deals with an intersection between business ethics, corporate social responsibility, and development economics. My connection to the subject is deep: I am Vietnamese-American, and frequent visits to Vietnam have taught me that there are growing problems with the intersection of international aid and the environment. Institutions like the World Bank strive to provide aid to people who truly need it, but this process may come with significant perverse and unfortunate effects. However, certain companies in the private sector show progress. I am a former intern of Unilever and a future employee of PepsiCo, and both companies have made progress in improving the environment (and by extension the food supply) for local communities. As an Eagle Scout, I grew up in the outdoors and the natural environment, and I intend to be part of the effort to ensure its protection from Climate Change. I hope to find lessons in some of these great practices and suggest a model for implementing some of these solutions in efforts by the World Bank.

II) Introduction – Literature Review

When exploring the implications of an organization's actions to the environment, there are two greater concepts at play: value maximization and stakeholder theory. An organization, like a person, has goals it seeks to accomplish in its activities. Michael Jensen, in "Value Maximization, Stakeholder Theory, and the Corporate Objective Function" offers an analysis of the dichotomy of these goals. For this paper, value maximization is defined as the "maximization of the long-term market value of the firm."¹ The idea of value maximization is rooted deeply in the study of economics and finance. In contrast, stakeholder theory says "that managers should make

¹ Michael Jensen. "Value Maximization, Stakeholder Theory, and the Corporate Objective Function." Harvard Business School (2001): 8.

decisions that take account of the interests of *all* the stakeholders in a firm.”² Beyond financial claimholders, stakeholders include but are not limited to “employees, customers, communities, and government officials”.³ In this paper, the environment (and all communities and people affected by it) is the key stakeholder being considered.

The organizational goals of the World Bank and of CPG companies are topics continuously being critiqued and discussed. The body of literature that reviews these ideas often uses different frameworks revolving around value maximization and stakeholder theory. Certain literature has been critical of the World Bank and its neo-liberal policy agenda, even saying that the Bank “proposes the privatization of education, health and environment protection.”⁴ With regards to companies like PepsiCo and Unilever, the literature on Corporate Social Responsibility (CSR) is highly polarized. There is no standard definition for CSR, but “academics and practitioners have sought to grapple with the issue of whether organisations can 'do well' by 'doing good' and whether the former helps to explain why some enterprises engage in the latter.”⁵ Friedman's view that businesses are only responsible for making profits is finding less popularity in recent years as more and more companies are adopting CSR policies.

While value maximization and stakeholder theory seem to have contrasting goals, organizations often strive to achieve both simultaneously. Given certain incentive structures, value maximization tends to happen on a shorter time horizon. With the presence of rewards and variable pay, employees in these organizations may want to maximize value to maximize their own utility. Stakeholder theory tends to lend itself better for goals on a longer time horizon.

² Michael Jensen. “Value Maximization, Stakeholder Theory, and the Corporate Objective Function.” *Harvard Business Review* (2001): 8.

³ Ibid.

⁴ Luiz Carlos Bresser Pereira. “Development Economics and the World Bank's Identity Crisis.” *Review of International Political Economy* (1995): 211.

⁵ Ian Worthington. “Researching the Drivers of Socially Responsible Purchasing: A Cross-National Study of Supplier Diversity Initiatives.” *Journal of Business Ethics* (2008): 319.

Michael Jensen analyzes the importance of time horizon in considering these goals. By integrating time horizon into these concepts, Jensen is able to create better alignment within the dichotomy of these organizations' goals:

“Enlightened value maximization uses much of the structure of stakeholder theory but accepts maximization of the long run value of the firm as the criterion for making the requisite tradeoffs among its stakeholders. Enlightened stakeholder theory, while focusing attention on meeting the demands of all important corporate constituencies, specifies long-term value maximization as the firm's objective.”⁶

These ideals consolidate the multiple objectives that arise with stakeholder theory and value maximization, better incorporating the tradeoffs managers must make.

This paper is primarily concerned with the environment. In the last century, it is clear that the natural environment and resources of the earth are changing. A recent article from Harvard Business School in collaboration with the World Bank entitled “Climate Management: The Biggest Future Shock to the Global Food System” provides a telling description of where the natural environment is headed:

“By the middle of this century, access to fresh water in many parts of Asia will decline, and continued urbanization and industrialization will have a detrimental effect on access to natural resources.ⁱ In South America, production of crops and livestock is expected to decline, and forested areas of the eastern Amazon will be at risk of becoming savannas. Increased temperature may make some regions of North America inhospitable for crops that are already nearing their limits for temperature tolerance.”⁷

⁶ Michael Jensen. “Value Maximization, Stakeholder Theory, and the Corporate Objective Function.” *Harvard Business Review* (2001): 8-9.

⁷ Ray Goldberg and Djordjija Petkoski. “Climate Management: The Biggest Future Shock to the Global Food System.” *Harvard Business Review* (2011): 1.

The gravity of the problem is serious. Like the HBR article, this paper will not debate the true causes of global warming and climate change. It is important to note that these effects are serious and that the organizations being analyzed play a key role in the future of the environment. In this HBR article, Ray Goldberg and Djordjija Petkoski discuss the “interrelated and interdependent conditions—including poverty, disease, malnutrition, economic development and access to limited land and water resources”⁸ that affect climate change. The decisions and policies made by the World Bank and large companies like PepsiCo and Unilever will ultimately impact greater world issues such as economic development and poverty. In this HBR article, Goldberg and Petkoski outline a variety of successful initiatives lead by large companies (including PepsiCo and Unilever) in the private sector to mitigate the negative environmental externalities of their businesses. These are telling examples of how there are successful case studies and that it is important to “take an integrated approach and develop models that look at the whole”⁹ environmental issue.

The literature discussed in this introduction will be further integrated into the analysis of the World Bank, PepsiCo, and Unilever as well as their interactions with the environment.

III) Research Question

This paper is an effort to understand the dichotomy of how these two types of large organizations affect the environment in their normal business activities. The importance of this problem lies in the fact that there are incentive structures at the World Bank that do not prioritize impact on the environment. Incentive structures at multinational consumer goods company like Unilever and

⁸ Ray Goldberg and Djordjija Petkoski. “Climate Management: The Biggest Future Shock to the Global Food System.” *Harvard Business Review* (2011): 1.

⁹ Ibid.

PepsiCo are more aligned with environmental protection. A framework to bridge this gap would potentially allow for policies and practices that better preserve the environment.

I acknowledge that the World Bank often works with companies like Unilever and PepsiCo to build their CSR policy. There is a plethora of literature on the merits and motivation of Corporate Social Responsibility. The purpose of this paper is not to evaluate the effectiveness of any of these efforts but rather these efforts' impact on the environment. By analyzing this dichotomy, we can isolate certain motivational variables and ultimately determine some of the root causes of this behavior. While a conclusive answer is unlikely, a new framework can be developed to better understand the problem and to provide the building blocks on which to form the solution. Ultimately the questions this paper attempts to answer are: **What incentives do the World Bank and Unilever/PepsiCo have to affect the environment the way they do? How do environmental protection initiatives align with their goals? What policies or incentives can be transferred from one institution to the next?**

By employing a model of rational choice theory, this paper will present for framework for understanding these organizations' behavior with the environment. The analysis will include academic research on various case studies of development and infrastructure projects by the World Bank and CSR efforts done by Unilever and PepsiCo. The model of rational choice theory will then be applied to the case studies to separate the various behavioral causes.

IV) Model of Rational Choice Theory

To understand the behavior of these large organizations, I have chosen to use Rational Choice Theory. While there is variance in behavior that the theory does not account for, it is a staple in economics for the analysis of the costs and benefits in various decisions. It is finding increasing

acceptance in the social sciences. This paper will introduce a model of costs and benefits that these organizations face and subsequently apply this model to various case studies. The model lists the determinants of these organizations' utility when engaging in decisions that affect the environment:

$$\text{Utility} = \int \text{Social Benefits} + \int \text{Long-Term Private Benefits} - \int (p * \text{Social Penalties/Headline Risks}) \\ - \int \text{Short-Term Financial Costs} - \int \text{Social Costs}$$

The model assumes that these organizations have utility functions and act in their best interests to maximize this utility. Like any Rational Choice Theory model, it assumes that more is better than less. Furthermore, it assumes that organizations will weight costs and benefits before making a decision that maximizes their utility.

The factors/determinants of this model are by no means original, but they are compiled according to the author's own reading, coursework, and knowledge of business ethics. The organizations in discussion (World Bank, PepsiCo, Unilever, and Nestle) all have primary activities. We assume that they engage in business activities that serve their primary goals. For the World Bank, the activities are designed to achieve a single objective: reducing poverty. For these CPG companies, the activities are designed to maximize shareholder value. The purpose of this model is to provide a framework for understanding the potential negative externalities for the environment that result from their decisions.

In order to be more "green" and environmentally friendly, private sector actors have to change the way they are currently conducting their business. Whether this is through alternative methods or preventative action, this usually results in higher financial costs. In the short term, the decision

to protect the environment in these business activities results in a lower bottom line. The other costs that these companies have to bear are risks due to bad publicity. In a business setting where being green is becoming increasingly important to an organization's public image, there is significant "headline risk" when organizations have a negative impact on the environment. This can hurt the company's reputation and ultimately hurt its shareholder and market value in the long term. The occurrence of a social penalty like regulation or a negative headline is not guaranteed to occur, so the model dictates that this happens with probability p . Finally, actions that impact the environment ultimately have a cost to society. In accordance to this model, short-term financial costs, headline risk, and social costs are the three central costs to evaluating negative externalities to the environment.

These organizations also benefit from mitigating their damage to the environment. There is a plethora of research that suggests damage to the natural environment is accelerating at an unprecedented level. This is caused by climate change, pollution, and greenhouse gas emissions. Thus, in the long term, the company benefits by being environmentally conscious because it ensures the ability to do business in the future. Stakeholder theory suggests that these organizations also have a duty to a wide range of stakeholders in addition to shareholders. By being more environmentally friendly, there is a social benefit to the environment, surrounding communities, and various advocacy groups. For the organization, this is beneficial in building a positive reputation and expanding the universe of potential customers/consumers. In other words, by controlling the negative effects of their business activities on the environment, these organizations reduce the social costs to other stakeholders resulting in higher benefit for all parties. In accordance to this model, social benefits and long term benefits are the two central benefits to evaluating negative externalities to the environment.

This framework introduces a set of categories by which we can dissect the different costs and benefits in making these decisions. While this paper will not attempt to perform quantitative valuations of various decisions, this dichotomy of case studies will allow for an analysis which demonstrates how these organizations value these costs and benefits. The organizational structure will be analyzed in accordance to this model to explain why certain incentives reinforce a particular factor more than others.

V) Case Studies

A. World Bank Loan: Medupi Power Station – Lephalele, South Africa

The Medupi Power Station is a coal-fired power plant currently being constructed in Lephalele, South Africa. In “Competing discourses of energy development: The implications of the Medupi coal-fired power plant in South Africa”, William Rafey and Benjamin Sovacool discuss the costs and benefits of this project. The power station will produce 4800 megawatts (MW) of power for the people of South Africa. The Medupi Power Station is being constructed by Eskom, a South African public utility. While some funding was generated domestically, international financing was required to fully construct the power plant, and this financing was provided by the World Bank. The World Bank lent over three billion dollars to the South African government to produce the Medupi Power Station alone. The justification for the power plant is outlined by Rafey and Sovacool’s analysis of the project:

“(1) a theme of economic development to assist South Africa’s recovery from the global recession and revitalize its industrial competitiveness; (2) a theme of environmental

sustainability emphasizing the project's place in a low-carbon future; and (3) a theme of energy security that supports access to electricity for all South Africans.”¹⁰

These themes are aligned with the World Bank's greater mission to build infrastructure in developing countries and reduce poverty. This plant introduces the potential for a domestic energy supply that is inexpensive. However, the greater implications of the project reveal potential for great damage and pollution to the environment. Not only is the coal-fired power plant not a source of renewable energy, but it further perpetuates income inequality in South Africa due to the incentive structure of the project:

“(1) a theme of maldevelopment and secrecy that characterizes the project as a collusion between the corrupt ANC, energy-intensive industry, and the imperialist World Bank; (2) a theme emphasizing both Medupi's global and local environmental degradation; and (3) a theme of energy poverty, which highlights the disproportionate impact of energy price increases within the legacy of apartheid and concludes with the imperative of a clean-energy future.”¹¹

Many critics have said that coal supplies need to be managed better and that the World Bank's goals were misguided:

“Environmental activists who traditionally take up the cause of developing countries this time insisted that South Africa must set itself on a cleaner energy path. Yet their top villain was the World Bank, which green groups accused of undermining its own effort to become a major player in financing climate change adaptation and mitigation efforts.”¹²

¹⁰ William Rafey and Benjamin Sovacool. “Competing discourses of energy development: The implications of the Medupi coal-fired power plant in South Africa.” *Global Environmental Change* (2011): 1144.

¹¹ Ibid.

¹² Lisa Friedman. “South Africa Wins \$3.75 Billion Coal Loan.” *New York Times*, April 19, 2010.

It is clear that while the expressed goals of the plant were to provide power to all South Africans, members of the African National Congress (ANC) would profit greatly from the project: “Hitachi Power Africa was awarded a multibillion-rand contract for Eskom’s new Medupi power station.”¹³ The ANC has a large investment in Hitachi power, and the World Bank loan which financed the Medupi Power Station may ultimately finance members of the ANC.

In accordance to the model, the World Bank has weighted the various costs and benefits differently resulting in an outcome other than the desired outcome. The Medupi Power Station was designed to be a project that would provide social benefits to all South Africans as well as a long term revenue source for the government. However, the coal-fired plant has long term social costs that are not taken into account. The amount of literature on the subject shows that the headline risk for the World Bank has not been substantial. However, the probability p that they are further criticized in the public grows as the project nears completion and more pollution is being done in the surrounding Lephalale area. The three billion dollar investment represents the cost to the World Bank, and there is an additional amount that is necessary to invest in clean energy. The misrepresentation of costs and benefits can be further explained by the World Bank’s organizational structure.

B. PepsiCo: Sabritas and Sunflower Oil – San Gabriel, Mexico

Sabritas is a subsidiary of PepsiCo in Mexico that makes potato chips. Sabritas chips are a popular snack food in Mexico with about 80% market share. This case study will analyze one of PepsiCo’s efforts to engage in environmentally responsible actions that will shape the future of Sabritas chips.

¹³ "Opposition slams ANC 'about-turn' on Hitachi". *Mail & Guardian Online*, April 14, 2010.

One example of PepsiCo's successful CSR efforts can be found in its decision to better integrate farmers living in San Gabriel near the Jalisco Mountain Range in Mexico. Before PepsiCo's effort, "farmers would make the dangerous trek north from this tiny town hidden in the rugged folds of the Jalisco mountain range to the United States, hoping to earn enough money doing odd jobs to cover debts incurred while cultivating the small plots of land that have been in their families for generations."¹⁴

PepsiCo's successful initiative allowed the 300 farmers in this region to sell their corn directly to PepsiCo rather than through middlemen. This not only provides income to the farmers but also other important tools for their businesses: "The deal enables the small farmers to secure credit to buy seeds and fertilizers, crop insurance and equipment."¹⁵ This new approach is driven by market demand. This initiative in 2011 continued to expand to more farmers in order to provide a source of sunflower oil. Sunflower oil replaced the palm oil necessary to make Sabritas chip. This locally produced product was cheaper and more nutritious.

The New York Times article covering the details of the initiative outlines the merits of PepsiCo's actions and acknowledges the idea that engaging the local farmers was not only good for the community but "good for business."¹⁶ PepsiCo's corporate culture and stance on sustainability issues provide greater insight to the ideology behind this decision:

"[W]e're working across our agricultural supply chain to ensure our practices are efficient and sustainable. A significant part of this effort is our support for local farmers, by providing training in best practices, including water savings techniques, waste reuse, soil protection and chemical use. Through these practices, we are raising farm productivity, which increases farmers' incomes and improves the quality of life in many communities."

¹⁴ Strom, Stephanie. "For Pepsi, a Business Decision with Social Benefit." *New York Times*, February 21, 2011.

¹⁵ Ibid.

¹⁶ Ibid.

PepsiCo's decision to work with local producers in proximity to existing factories demonstrates the company's awareness of climate change. The addition of another factory would have contributed to the company's carbon footprint. It is clear that while PepsiCo gained substantial public praise for its actions (example: New York Times article), they also understand that many parties can benefit from the decision: "The corn project saved PepsiCo transportation costs because the farms were close to two of its factories, and the use of local farms assured it access to types of corn best suited to its products and processes."¹⁷ This savings in transportation costs and decision not to create another factory to process sunflower oil has a net positive impact on the environment.

In accordance to the model, there were creative ways in which PepsiCo evaluated the costs and benefits of this initiative. While there were some rising short term financial costs, the long term financial benefits are clear. Through Sabritas, PepsiCo was able to act on its ideology regarding climate change:

"Because these changes could have an impact on the availability or pricing of certain commodities that are necessary for our products, we are continuously working to address climate change, from scaling up the company's use of renewable fuel sources to reducing energy consumption."¹⁸

This type of ideology expressed by PepsiCo effectively integrates the long term private benefits for PepsiCo as well as the greater social benefits to the farmer community in San Gabriel. PepsiCo was able to benefit from positive headlines and effectively reduced the greater social costs. It is clear that the organizational structure and incentives allowed for PepsiCo to better account for greater social benefits.

¹⁷ Strom, Stephanie. "For Pepsi, a Business Decision with Social Benefit." *New York Times*, February 21, 2011.

¹⁸ "PepsiCo Climate Change," <http://www.pepsico.com/purpose/environmental-sustainability/climate-change.html>.

C. World Bank Project: Petroleum Development and Pipeline Project – Chad and Cameroon

The following case study is a more well-known, unsuccessful World Bank project. In 2000, the World Bank's private investing arm, the International Finance Corporation (IFC), funded the Chad-Cameroon Petroleum Development and Pipeline project. Articles by Jeremy Keenan from the *Review of African Political Economy* provide basic insights into the goals of the project:

“The technical details of the project were relatively straightforward. Significant oil deposits have been found in southern Chad. Reserves of the Miandoum, Bolobo and Kome fields in the Doba basin are put at over 1 billion barrels... the only way to export the oil is by a 1,070 km pipeline that runs from Kome in southern Chad across Cameroon to the Atlantic coast at Kribi; 890 kms of the pipeline are in Cameroon.”¹⁹

The motivation for the project is made clear by Nikola Kojucharov regarding potential revenues for the government of Chad: “At a maximum production capacity of 225,000 barrels per day (bpd), the pipeline promises to bring \$5 billion in oil revenues into Chad's economy over a 25-year period.”²⁰ This potential revenue justified the initial World Bank investment of \$3.5 billion. In 2008, the World Bank abandoned the project due to corrupt decisions from the government of Chad regarding the revenues gained from the pipeline. In short, the government failed to honor its obligations to the people of Chad: “The bank, in a statement yesterday, said it was terminating the accord because the government of President Idriss Deby failed to meet its commitments to allocate funds to health, education and rural-development projects.”²¹ The problem was primarily rooted in governance.

¹⁹ Jeremy Keenan. “Chad-Cameroon Oil Pipeline: World Bank & ExxonMobil in 'Last Chance Saloon'.” *Review of African Political Economy* (2005): 396.

²⁰ Nikola Kojucharov. “Poverty, Petroleum & Policy Intervention: Lessons from the Chad-Cameroon Pipeline.” *Review of African Political Economy* (2007): 481.

²¹ Maier, Karl. “World Bank Ends Funding for Chad-Cameroon Oil Pipeline Project.” *Bloomberg*, September 10, 2008.

The literature revolving around the project acknowledges that the World Bank ultimately made the correct decision and isolates the cause of the problem to the government of Chad. Furthermore, the both Keenan and Kojucharov discuss the idea of resource curse in discussing the project. While the project presented serious financial and political consequences, damage to the environment directly impacted local communities in a more severe matter. The lack of governance by the World Bank resulted in fewer precautions being taken to install “Emergency Shut-down Valves (ESDVs)”²². These valves “are installed at 'strategic' locations, including both sides of major river crossings in order to protect drinking water resources from the threat of oil pollution. The pipeline crosses some 25 rivers, 17 of which ExxonMobil has identified as being major.”²³ Keenan elaborates on the lack of safety measures taken in installing the valves, and ultimately “the environmental issues are clearly related to the rights to physical well-being and survival of people in such marginal societies.”²⁴

Cameroon was also affected by the project in adverse ways:

“Although Cameroon was ranked by Transparency International as one of the most corrupt countries in the world, the World Bank did not use its leverage to ensure that new revenue management laws were enacted, nor have any increased transparency concessions or other special measures been put in place to manage this new revenue source.”²⁵

²² Jeremy Keenan. “Chad-Cameroon Oil Pipeline: World Bank &ExxonMobil in 'Last Chance Saloon'.” *Review of African Political Economy* (2005): 398.

²³ Ibid.

²⁴ “Chad Cameroon Oil Pipeline Project,” <http://www.columbia.edu/itc/sipa/martin/chad-cam/overview.html>

²⁵ Jeremy Keenan. “Chad-Cameroon Oil Pipeline: World Bank &ExxonMobil in 'Last Chance Saloon'.” *Review of African Political Economy* (2005): 398.

While the World Bank asserts that “the main project was technically well implemented and a financial success”²⁶, they also acknowledge that “the operation has taken up more land than originally anticipated. This has adversely affected some households that support themselves through subsistence agriculture.”²⁷ The project has elevated risks in the event of a disaster. With the current government, revenues from the pipeline do not appear to be used in an appropriate manner.

In the context of the model, p is dramatically reduced due to the poor governance and lack of transparency of the Chadian government. The probability of negative headlines decreases because local communities are less aware of the environmental risks. The World Bank correctly identified a natural resource (oil) that would be a substantial source of revenue for Chad. However, their lack of accountability resulted in undervaluing the social costs of taking the necessary safety precautions in constructing the pipeline. As it stands now, the long term private benefits are in question since the “objectives of capacity building to manage the petroleum sector and helping Chad reduce poverty and improve governance were not met.”²⁸ The long term social costs are high to the local communities living near the rivers crossing the pipeline.

D. Unilever Palm Oil Project – Indonesia

Unilever is a large consumer packaged goods company that mainly produces personal care/hygiene related products. With Proctor & Gamble as its main global competitor, both

²⁶ World Bank. “Lessons from an Evaluation of the Chad-Cameroon Oil Development and Pipeline Program,” <<http://web.worldbank.org/external/default/main?theSitePK=1324361&piPK=64252979&pagePK=64253958&contentMDK=22389300>>

²⁷ World Bank. “Chad-Cameroon Oil Development Project,” <<http://web.worldbank.org/WBSITE/EXTERNAL/EXTSITETOOLS/0,,contentMDK:20263700~menuPK:534320~pagePK:98400~piPK:98424~theSitePK:95474,00.html>>

²⁸ World Bank. “Lessons from an Evaluation of the Chad-Cameroon Oil Development and Pipeline Program,” <<http://web.worldbank.org/external/default/main?theSitePK=1324361&piPK=64252979&pagePK=64253958&contentMDK=22389300>>

companies consistently strive to find competitive advantages in the commodities market. Palm oil is a vital ingredient in many shampoos and conditioners and thus central to Unilever's business and strategy: "The Anglo-Dutch company is the world's biggest consumer of palm oil, using 1.36 million tons of the ingredient a year to make products such as Dove soap, Magnum ice cream and Vaseline lotion."²⁹ While traditional methods of palm oil processing have proven hazardous to the environment, Unilever has developed new methods and technologies that increase their competitiveness in the palm oil market while being sustainable and green. More specifically, in Indonesia, Unilever is working on all fronts to improve their "commitment to sourcing the oil in ways that don't destroy the environment"³⁰

Unilever's global effort with sustainable palm oil can be traced back to 2004 in its role in forming the Roundtable on Sustainable Palm Oil (RPSO), "an international organization founded in 2004 to bring together suppliers, producers, and consumers of palm oil, and created educational programs in Africa to teach sustainable land and water management techniques to its tea suppliers."³¹ In 2012, the effort in Indonesia consists of working with the Indonesian government to build sustainable plants. Indonesia remains one of the world's largest producers of palm oil, and the production process can often lead to deforestation of palm trees and the endangerment of certain animal species.

Currently, Unilever has made long term goals in working towards sustainable palm oil consumption: "The company's new goal...is that within eight years all of the palm oil it buys will come from traceable sources that are certified as sustainable."³² One should note that determining palm oil sustainability is complex and controversial: "Processing plants often

²⁹ Paul Sonne. "Unilever Takes Palm Oil in Hand." *Wall Street Journal*, April 24, 2012.

³⁰ Ibid.

³¹ Ray Goldberg and Djordjija Petkoski. "Climate Management: The Biggest Future Shock to the Global Food System." *Harvard Business Review* (2011): 1

³² Paul Sonne. "Unilever Takes Palm Oil in Hand." *Wall Street Journal*, April 24, 2012.

combine oil from sustainable plantations with nonsustainable oil in a vat, making the source of a final ingredient difficult to pinpoint.”³³ Unilever’s work with RPSO has provided some measurement of sustainability through GreenPalm certificates which help legitimize sustainability through an audit process:

“Unilever considered about two-thirds of the palm oil it used last year sustainable, not because it actually came from traceable sources, but because it bought 803,000 GreenPalm certificates, plus the 27,000 tons of oil it bought from traceable plantations.”³⁴

Unilever’s motivation for sustainable palm oil is not only environmentally motivated but business oriented as well: “Demand for palm oil has increased substantially since the 1990s, resulting in a 43% increase in the amount of land under cultivation for palm oil.”³⁵ It is clear that for the world’s largest consumer of palm oil, unsustainable usage will ultimately deplete natural resources. In 2012, Unilever launched the “Sustainable Living Plan”, and the ideology of the plan speaks to the relevance of being green to the business: “Consumers want it, retailers want it, it fuels innovation, it helps develop new markets, it saves money, [and] it inspires our people.”³⁶ Due to the long term nature of the production process and the improvement of the production process, Unilever has developed “oil palm estate[s] and cooperative schemes [which] often provide support to local smallholder outgrowers during the 3-year period before the crop starts to yield”.³⁷ For Unilever, the benefits do not necessarily come from positive headlines but rather a firm recognition of the long term private benefits and social costs.

³³ Paul Sonne. “Unilever Takes Palm Oil in Hand.” *Wall Street Journal*, April 24, 2012.

³⁴ Ibid.

³⁵ Ray Goldberg and Djordjija Petkoski. “Climate Management: The Biggest Future Shock to the Global Food System.” *Harvard Business Review* (2011): 1

³⁶ Unilever. “Our Sustainability Strategy” <http://www.unileverusa.com/sustainable-living/ourapproach/oursustainabilitystrategy/>

³⁷ B. Gail Smith. “Developing Sustainable Food Supply Chains.” *Philosophical Transactions: Biological Sciences* (2008).

VI) Organizational Analyses

The four case studies discussed above reveal certain incentives that reinforce particular factors within the model. In the Medupi Power Station case, the World Bank's misrepresentation of financial costs and benefits lead to higher social costs for the environment. Similarly, the Chad-Cameroon Petroleum Development and Pipeline project demonstrated some lack of accountability regarding environmental safety measures in large infrastructure projects. The case study of PepsiCo's CSR effort with Sabritas in San Gabriel, Mexico is an example of mitigating negative headline risk by engaging with the local environment in a productive manner. The case study of Unilever's CSR effort with the Palm Oil Project in Indonesia demonstrates how positive environmental interactions impact the value chain and the viability of the business. While these are only a few case studies, they are helpful in illustrating the results of different organizational structures and incentives. While analysis of the case studies was more heavily grounded in news media, the following organizational analyses will rely heavily on academia to understand how these organizations behave with the environment.

A. The World Bank

Although this paper has outlined some unfortunate externalities that have resulted from World Bank activity, this research does not seek to antagonize the World Bank in any manner. The motives of "The Bank" are generally good and altruistic and there are certainly many success stories. Significant progress has been made on the World Bank's Millennium Development Goals. While one of these goals is "ensure environmental sustainability" the negative externalities to the environment have been a result of greater structural factors: an identity crisis, neo-liberal policy agenda, and largely speaking, organizational culture.

In “Development Economics and the World Bank's Identity Crisis”, Luiz Carlos Bresser Pereira, a former Brazilian finance minister, provides insightful analysis of the World Bank and its changing goals throughout the bank’s history. Pereira examines the history of the Bank and discusses how changing agendas have greatly impacted the bank’s “operational philosophy”. Pereira correctly notes that the World Bank has certainly outlived its original purpose. When the World Bank was conceived after WWII, it had two primary objectives: (1) to assist with the reconstruction of postwar Europe and (2) to assist developing countries in the processes of industrialization and growth. Most people affirm that the first goal was achieved. With regards to the second goal, while many countries are still undergoing the process of development, there has been success in Latin America and Asia. With these goals being mostly accomplished, the World Bank re-oriented itself to poverty reduction and aligning itself with the United Nations’ Millennium Development Goals. Pereira critically asserts that the actual people working towards the Bank’s goals have changed the agenda and overall purpose of the banks:

“After all, what is the World Bank? Does it remain a development bank, as was the design of its founders, or is it changing into a kind of commercial bank that rolls over debts and a service institution that advises developing countries, taking advantage from the fact that it assembles the largest group of competent economists specialized in economic and social development in the world? Is it mainly an institution oriented to economic development or a political and ideological institution obeying the policies of its main shareholders?”³⁸

While research and work at the Bank is thorough and often effective, there is an inherent conservative bias towards private sector solutions and for solutions that have proven successful

³⁸ Luiz Carlos Bresser Pereira. “Development Economics and the World Bank's Identity Crisis.” *Review of International Political Economy* (1995): 211.

in the developed world. As Pereira notes, “[t]he neoliberal economists, helped by the breakdown of the Keynesian consensus and the rise of a conservative wave in the First World, were the ones who used this success story to reaffirm the neo-liberal credo and accentuate the crisis of development economics.”³⁹

Pereira’s assertion of the World Bank’s identity crisis is critical, but it does illustrate how the re-orientation of the organization has affected its inherent economic beliefs and agendas. Robin Broad provides an analysis of World Bank’s Development Economics Vice-Presidency (DEC), an important arm of the World Bank that researches solutions for many development projects. Broad critically argues that the change in economic beliefs and agendas is part of a greater paradigm. In short, he argues that the World Bank maintains a role as the “projector of the neoliberal economic paradigm, the paradigm that came to prominence in the 1980s and 1990s that centers on deregulation, privatization, and financial and trade liberalization.”⁴⁰

This conservative bias and neoliberal policy agenda does explain some of the negative environmental externalities outlined in the case studies. In “Reforming the World Bank – Creative Destruction”, Jessica Einhorn provides commentary on how this change in behavior has impacted World Bank activity:

“Critics were charging that the bank was overemphasizing growth at the expense of equity and poverty alleviation; paying too little attention to environmental sustainability; focusing too much on large infrastructure projects that damaged both the natural

³⁹ Luiz Carlos Bresser Pereira. “Development Economics and the World Bank's Identity Crisis.” *Review of International Political Economy* (1995): 211.

⁴⁰ Robin Broad. “Research, Knowledge, and the Art of 'Paradigm Maintenance': The World Bank's Development Economics Vice-Presidency (DEC)” *Review of International Political Economy* (2006): 387.

environment and poor communities; and, by so enthusiastically endorsing globalization and liberalization, aligning itself with elites against the powerless.”⁴¹

In the context of the model, this change in bank thinking provides insight on why the Bank may have valued certain long term social benefits over short term financial costs. With regards to social benefit, being green and protection of the natural environment are not valued as highly in the long term social benefits factor. In short, environmental protection procedures are not at the forefront of the bank’s ideology, and as Broad notes, “much of bank thinking that has been biased toward trade liberalization and export-orientation.”⁴²

To understand the World Bank’s ideology, it is necessary to understand the greater organizational culture. All three authors discuss the organizational incentives in place to motivate people working at the World Bank. Like any large organization, it is important to remember that at the micro level, this affects individual people’s employment and professional lives. Broad provides a telling description of the incentives in place:

“These mutually-reinforcing structures include a series of incentives increasing an individual's chances to be hired, to advance one's career, to be published, to be promoted by the Bank's External Affairs department, and, in general, to be assessed positively. And, they also include selective enforcement of rules, discouragement of dissonant discourse, and even the manipulation of data to fit the paradigm. As the article demonstrates, this incentive or reward system is typically unstated.”⁴³

This certainly leads to adverse project selection. As stated earlier, the World Bank found success in Latin America and Asia, but projects in Africa have been found unsatisfactory. Some media

⁴¹ Jessica Einhorn. “Reforming the World Bank: Creative Destruction.” *Foreign Affairs* (2006): 18.

⁴² Robin Broad. “Research, Knowledge, and the Art of 'Paradigm Maintenance': The World Bank's Development Economics Vice-Presidency (DEC)” *Review of International Political Economy* (2006): 390.

⁴³ Robin Broad. “Research, Knowledge, and the Art of 'Paradigm Maintenance': The World Bank's Development Economics Vice-Presidency (DEC)” *Review of International Political Economy* (2006): 388.

assert that the World Bank often takes projects in countries like China and Turkey where the Bank's services are not as needed as in countries in Sub-Saharan Africa.

The International Bank for Reconstruction and Development (IBRD) is the arm of the World Bank that directly focuses on poverty reduction through micro loans. Einhorn critically notes that the World Bank is the main vehicle for work among the development community and that "[a]ny advocate of reform must be frank about the bureaucratic interests that currently want the IBRD to survive as long as possible. The IBRD has become a crucial source of financial support and clout for the development community."⁴⁴

This work environment impacts the work done by the Bank, and the work impacts externalities to the environment. This culture manifests itself in a variety of ways: "hiring, publishing, selective enforcement of rules, discouraging dissonant discourse, manipulation of data, external projection."⁴⁵ For example," internal documents indicate that DEC states the mission of its trade and globalization-related research, not as an a priori hypothesis, but as fact, as if it already knows the answer."⁴⁶

A short analysis of the World Bank's rhetoric also provides some insight into World Bank culture. Pereira notes:

"In fact, the dogmatic neo-liberal views are more evident in the rhetoric than in the practice of the Bank. The practice is necessarily more pragmatic. The rhetoric, particularly in private conversation, is much bolder, in accord with the dominant views in

⁴⁴ Jessica Einhorn. "Reforming the World Bank: Creative Destruction." *Foreign Affairs* (2006): 21.

⁴⁵ Robin Broad. "Research, Knowledge, and the Art of 'Paradigm Maintenance': The World Bank's Development Economics Vice-Presidency (DEC)" *Review of International Political Economy* (2006): 388.

⁴⁶ Ibid.

Washington. The problem is that, in certain cases, these ideological views may lead to the adoption of radical policies that are inconsistent with structural reforms.”⁴⁷

This aspect of the World Bank culture is central to understanding at least part of the causes behind negative externalities to the environment. Internally, the World Bank faces an identity crisis as approaches to poverty reduction become more varied. Ideologies and economic agendas play a key part in shaping the World Bank’s work. These ideas manifest themselves into organizational structures and incentives that prevent the Bank from doing work in the most effective way. These inconsistencies and inefficiencies play a part in the negative externalities to the environment seen in World Bank projects.

B. CPG Companies – PepsiCo and Unilever

This paper has presented two case studies of CSR efforts done by two large consumer goods companies, PepsiCo and Unilever. While the business activities of these large companies are complex, these two case studies provide some insight into the drivers and incentives causing environmentally responsible behavior. As Jamie Snider states:

“[C]ase study research is particularly well-suited to exploratory investigations, where questions of 'how' and 'why' are of prime concern to the researcher. As a research strategy however, such an approach does have some limitations, not least the question of how far one can generalise from a limited number of cases. This problem we readily acknowledge and it underpins our call for further studies in this under-researched area.”⁴⁸

⁴⁷ Luiz Carlos Bresser Pereira. “Development Economics and the World Bank's Identity Crisis.” *Review of International Political Economy* (1995): 214.

⁴⁸ Jamie Snider. “Corporate Social Responsibility in the 21st Century: A View from the World's Most Successful Firms.” *Journal of Business Ethics* (2003): 179.

The Sabritas farming project in Mexico and Unilever's Palm Oil project in Indonesia are effective examples of how these companies are integrating CSR efforts into the value chain. While there are no hard conclusions, both cases help answer the 'how' and 'why' regarding corporate social responsibility. In both case studies, the rhetoric and CSR ideology of the company was analyzed, and in short, there was a common theme of "doing well while doing good". In the literature review, Jensen's ideas of "enlightened stakeholder theory" and "enlightened value maximization" were discussed, and it is evident that both PepsiCo and Unilever are aligning themselves with these ideas. In the context of the model, PepsiCo and Unilever essentially weigh the long term and short term costs and benefits and make a decision that maximizes their value/utility. In recent years, the CSR efforts demonstrate that long term private and social benefits are being valued more highly. Furthermore, the probability p of negative headline risk is increasing, and due to competitiveness, having negative externalities to the environment can significantly impact a company's public image. This organizational analysis will use academia to further illustrate the structures and incentives in place that lead to these actions.

The academic literature on CSR efforts by companies like Unilever and PepsiCo essentially revolves around value maximization, stakeholder theory, and the business case for being socially responsible. Generally speaking, the environment is regarded as a central part of the business and an important stakeholder in business activities. In discussing sustainable food supply chains, Unilever's B. Gail Smith states:

"Food businesses must justify any investment to their shareholders and internal management. The 'business case' for investment in more sustainable supply chains is strongest if investment costs can be used to improve profitability by generating products

with higher consumer value. Investment may also be justified in terms of risk management, corporate reputation, corporate culture or Corporate Social Responsibility (CSR).”⁴⁹

Smith’s elaboration here on the consumer value of various products demonstrates how the quality of products often does rely on the corporate image. Smith essentially illustrates how many of the benefits of CSR outweigh the costs. Ian Worthington adds to this discussion through a study of sustainable supplier initiatives. Worthington identifies certain underlying factors which influence a company’s behavior:

“Analysis of the qualitative data indicates that the sample organisations chose to develop supplier diversity initiatives against a background of influences arising within the regulatory, market and/or social domains. We identified four such influences: legislation/public policy, economic opportunities, stakeholder expectations and ethical influences.”⁵⁰

These four influences are evident throughout literature regarding CSR. They align with the most commonly referenced stakeholders in business. Jamie Snider finds a similar conclusion:

“...identified four components of CSR: economic, legal, ethical, and discretionary or philanthropic. The economic component is business's fundamental responsibility to make a profit and grow. The legal component is their duty to obey the law and to play by "the rules of the game." The ethical component is their responsibility to respect the rights of others and to meet the obligations placed on them by society that ensure these rights.

⁴⁹ B. Gail Smith. “Developing Sustainable Food Supply Chains.” *Philosophical Transactions: Biological Sciences* (2008).

⁵⁰ Ian Worthington. “Researching the Drivers of Socially Responsible Purchasing: A Cross-National Study of Supplier Diversity Initiatives.” *Journal of Business Ethics* (2008): 322.

Finally, the discretionary component involves philanthropic activities that support the broader community.”⁵¹

These four influences shape the long term private costs. Companies like Unilever and PepsiCo engage with the understanding that choosing not to be socially responsible has high costs. All the authors discussed here outline the importance of time horizon. Joelle Vanhamme elaborates on the importance of an ongoing CSR effort for long term benefits. Vanhamme argues that constant CSR is the only way to achieve legitimacy when it comes to dealing with the environment in a sustainable manner:

“CSR communication is ultimately a persuasion attempt of the company to create positive consumer perceptions. Thus, we suggest that companies involved for a long time in CSR activities when the crisis breaks out should be seen as less opportunistic and should enjoy a stronger reputation in terms of CSR than companies with shorter-term CSR involvement.”⁵²

The PepsiCo and Unilever case studies are certainly part of a larger effort. It is certainly probable that PepsiCo and Unilever have not always had altruistic incentives. For many companies, CSR can have short term benefits: “companies with a short history use CSR claims in crisis communication, consumers probably view it as a “quick fix” or trick to restore their image.”⁵³ However, Vanhamme continues to argue that having a ongoing CSR effort allows companies to hedge against on time incidents. In accordance to the model, this means that one-time costs from negative headlines are mitigated by a socially responsible history. As Vanhamme states,

⁵¹ Jamie Snider. “Corporate Social Responsibility in the 21st Century: A View from the World's Most Successful Firms.” *Journal of Business Ethics* (2003): 179.

⁵² Joelle Vanhamme. “ “Too Good to Be True!”. The Effectiveness of CSR History in Countering Negative Publicity.” *Journal of Business Ethics* (2009): 274.

⁵³ Ibid.

“companies with a long CSR track record can dismiss a crisis as a one-time incident, and consumers will tend to believe their more credible CSR claims.”⁵⁴

The academic analysis of corporate social responsibility is exploratory in nature, and while few conclusions are drawn about why companies actually engage in CSR, observations show that certain factors are consistent: long-term benefits for the business and the presence of competition. The long-term benefits align with Jensen’s interpretation of stakeholder theory and value maximization. The presence of competition is slowly changing the “rules of the game” as companies are slowly setting the standard for how business activity should interact with the environment.

VII) Learnings

The presentation of this dichotomy of organizations has not yielded conclusive answers, but rather observations that may frame future thinking and policy. The evolution of the World Bank as an organization has developed an ideology which resulted in unfortunate negative externalities to the environment. Companies like PepsiCo and Unilever are engaging more heavily in CSR due to competitiveness and a corporate dogma that values the long term value of the business. The four case studies provide telling examples and analyses for understanding some of the greater underlying factors. Tim O’Riordan provides a commentary on the relevance of these organizations to the environment:

“The corporate world is being watched, and some are recognizing that mismanaging ecosystems and local social wellbeing is bad for business. Environmental science is big for corporate guidance, as well as commanding highest political attention... There is not

⁵⁴ Joelle Vanhamme. “ "Too Good to Be True!". The Effectiveness of CSR History in Countering Negative Publicity.” *Journal of Business Ethics* (2009): 274.

environmental analysis of global resources or climate change that does not roll directly into large-scale politics”⁵⁵

The World Bank has fundamental elements in its organizational structure that prevent it from positively engaging with the environment like these CPG companies. The World Bank’s status as an international organization makes it less accountable for its actions. Unlike these CPG companies, the World Bank faces much less regulation. In his work, Broad observes this lack of accountability: “Yet, as one Bank economist admitted DEC has been ‘totally unscrutinized’ by the outside.”⁵⁶

In short, there are many aspects of CSR efforts that the World Bank should consider incorporating into its own structure. Jamali emphasizes the importance of the private sector in preserving the environment:

“Also implied in the debate is the idea that the private sector is the dominant engine of growth - the principle creator of value and managerial resources - and that it has an obligation to contribute to economic growth and opportunity - equitable and sustainable. CSR is therefore founded on a stronger recognition of the role of business as an active partner in a world of scarcity and dwindling resources.”⁵⁷

In addition to a lack of regulation, the World Bank’s academic structure prevents an effective dissemination of information. The structure of research has lead to a Bank where trade liberalization is a general answer for many problems, and the research reinforces this assumed

⁵⁵ Tim O’Riordan. “Environmental Science, Sustainability and Politics.” *Transactions of the Institute of British Geographers* (2004): 236.

⁵⁶ Robin Broad. “Research, Knowledge, and the Art of ‘Paradigm Maintenance’: The World Bank’s Development Economics Vice-Presidency (DEC)” *Review of International Political Economy* (2006): 388.

⁵⁷ Dima Jamali. “Corporate Social Responsibility (CSR): Theory and Practice in a Developing Country Context.” *Journal of Business Ethics* (2007): 245.

hypothesis. A focus on publishing and thinking about ideas makes the environment a second priority.

Change within the World Bank is not an easy task. Despite leadership changes and ongoing projects, Einhorn notes that “serious reform from within the bank seems unlikely for a host of reasons related to the structure of the institution itself as well as the political and financial context in which it operates.”⁵⁸ It is important to remember that for people in the development community, the World Bank is a source of employment and income and changing that structure affects individual people’s utility.

The presentation of this dichotomy illustrates that certain elements from CSR efforts done by CPG companies like PepsiCo and Unilever might lead to fewer negative externalities to the environment. The World Bank needs to better integrate the environment into the long run value of the organization. Development projects should be more scrutinized for their sustainability. This can happen with regulation and competition. The World Bank needs to be held more accountable for poor environmental practices by other governing bodies. This creates a greater threat of headline risk. In addition, competition and pressure from outside organizations will better help the Bank adhere to sustainable environmental practices. Other organizations such as the IMF, local governments, and even NGOS can present competition for the World Bank so that there is an added social pressure to be “green”. This introduces the possibility of headline risk, and the World Bank needs an incentive to maintain a more positive reputation in the development community. The transferability of these organizational structures and incentives is not certain. However, one will find that this added element to the organization may result in a better outcome for the environment.

⁵⁸ Jessica Einhorn. “Reforming the World Bank: Creative Destruction.” *Foreign Affairs* (2006): 18.

Damage to the environment is a current and relevant issue. While organizations like the World Bank, PepsiCo, and Unilever have their own objectives, it is clear that in order to continue operating, more effective measures must be taken to sustain the environment. Organizational structures and incentives help guide the understanding of why these organizations behave the way they do. In recent years, emerging cases of successful CSR efforts by CPG companies can provide a helpful framework for understanding how organizations like the World Bank can reduce environmental externalities.

Bibliography:

- Broad, Robin. "Research, Knowledge, and the Art of 'Paradigm Maintenance': The World Bank's Development Economics Vice-Presidency (DEC)" *Review of International Political Economy* (2006): 387-419.
- Einhorn, Jessica. "Reforming the World Bank: Creative Destruction." *Foreign Affairs* (2006): 17-22.
- Friedman, Lisa. "South Africa Wins \$3.75 Billion Coal Loan." *New York Times*, April 19, 2010
- Goldberg, Ray and Djordjija Petkoski. "Climate Management: The Biggest Future Shock to the Global Food System." *Harvard Business Review* (2011): 1-21.
- Jamali, Dima. "Corporate Social Responsibility (CSR): Theory and Practice in a Developing Country Context." *Journal of Business Ethics* (2007): 243-262.
- Jensen, Michael. "Value Maximization, Stakeholder Theory, and the Corporate Objective Function." *Harvard Business School* (2001): 1-17.
- Keenan, Jeremy. "Chad-Cameroon Oil Pipeline: World Bank & ExxonMobil in 'Last Chance Saloon'." *Review of African Political Economy* (2005): 395-405.
- Kojucharov, Nikola. "Poverty, Petroleum & Policy Intervention: Lessons from the Chad-Cameroon Pipeline." *Review of African Political Economy* (2007): 477-496.
- Maier, Karl. "World Bank Ends Funding for Chad-Cameroon Oil Pipeline Project." *Bloomberg*, September 10, 2008.
- "Opposition slams ANC 'about-turn' on Hitachi". *Mail & Guardian Online*, April 14, 2010.
- O'Riordan, Tim. "Environmental Science, Sustainability and Politics." *Transactions of the Institute of British Geographers* (2004): 234-247.

Pereira, Luiz Carlos Bresser. "Development Economics and the World Bank's Identity Crisis."

Review of International Political Economy (1995): 211-247.

Rafey, William and Benjamin Sovacool. "Competing discourses of energy development: The

implications of the Medupi coal-fired power plant in South Africa." *Global Environmental Change* (2011): 1141-1151.

Sonne, Paul. "Unilever Takes Palm Oil in Hand." *Wall Street Journal*, April 24, 2012.

Snider, Jamie. "Corporate Social Responsibility in the 21st Century: A View from the World's Most Successful Firms." *Journal of Business Ethics* (2003): 175-187.

Strom, Stephanie. "For Pepsi, a Business Decision with Social Benefit." *New York Times*, February 21, 2011.

Vanhamme, Joelle. "'Too Good to Be True!'. The Effectiveness of CSR History in Countering Negative Publicity." *Journal of Business Ethics* (2009): 273-283.

Worthington, Ian. "Researching the Drivers of Socially Responsible Purchasing: A Cross-National Study of Supplier Diversity Initiatives." *Journal of Business Ethics* (2008): 319-331.

Web Pages:

"Chad Cameroon Oil Pipeline Project," <<http://www.columbia.edu/itc/sipa/martin/chad-cam/overview.html>>

PepsiCo. "PepsiCo Climate Change," <<http://www.pepsico.com/purpose/environmental-sustainability/climate-change.html>>

Unilever. "Our Sustainability Strategy" <<http://www.unileverusa.com/sustainable-living/ourapproach/oursustainabilitystrategy>>

World Bank. “Lessons from an Evaluation of the Chad-Cameroon Oil Development and Pipeline Program,”

<<http://web.worldbank.org/external/default/main?theSitePK=1324361&piPK=64252979&pagePK=64253958&contentMDK=22389300>>

World Bank. “Chad-Cameroon Oil Development Project,”

<<http://web.worldbank.org/WBSITE/EXTERNAL/EXTSITETOOLS/0,,contentMDK:20263700~menuPK:534320~pagePK:98400~piPK:98424~theSitePK:95474,00.html>>

World Bank. “Lessons from an Evaluation of the Chad-Cameroon Oil Development and Pipeline

Program,”<<http://web.worldbank.org/external/default/main?theSitePK=1324361&piPK=64252979&pagePK=64253958&contentMDK=22389300>>
